



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/520,604

09/26/2005

Hans-Christian Swoboda

10191/3959

9654

26646

7590

09/09/2009

KENYON & KENYON LLP
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER

OLSEN, LIN B

ART UNIT

PAPER NUMBER

3661

MAIL DATE

DELIVERY MODE

09/09/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/520,604	Applicant(s) SWOBODA ET AL.	
	Examiner LIN B. OLSEN	Art Unit 3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9,10,12-19 and 21-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9,10,12-19 and 21-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims use the phrase "critically close", but that phrase is not defined in the specification. While "absolute minimum distance", "speed dependent minimum distance" and the "maximum deceleration collision avoidance distance" are defined and illustrated in Fig. 2, critically close is not defined relative to any of these.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim 9, 10, 12-19, 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Labuhn et al. (US 6,009,368) in view of U.S. Patent Pub. No. 2002/0177935 to Winner et al. Labuhn is concerned with an adaptive cruise control that uses deceleration control to prevent a vehicle from violating a desired minimum distance from a preceding vehicle. Winner is concerned with using an adaptive cruise control and a lane keeping control in the same vehicle.

With respect to **claim 9**, Labuhn discloses a method for notifying a driver of a motor vehicle equipped with an adaptive distance and speed controller, comprising: one of activating or deactivating a prompt which informs the driver that the vehicle is coming critically close to a target object (FIG. 4 and Column 8, lines 31-32, 36-43 and 52-53);

wherein the activation or deactivation of the prompt occurs (FIG. 4 and Column 8, lines 66-67 and Column 9, lines 1-2) as a function of at least one of:

i) a fixed minimum distance between a distance-controlled and speed- controlled vehicle and the target object (FIG. 4, block 411, where X_M is the minimum inter-vehicle spacing as described in Column 7, line 23)

ii) a relative speed-dependent minimum distance of the distance-controlled and speed- controlled vehicle in relation to the target object (FIG. 4, block 411, where VR_{TB} is the relative speed-dependent minimum distance as described in Column 3, lines 54-56), and

iii) a maximum vehicle deceleration producible by the distance and speed controller (FIG. 4, block 423 where D_{MAX} is represents a deceleration limit as described in Column 9, lines 53-62)

Labuhn's alert is not called a takeover alert; however, it does notify the driver when the vehicle gets critically close to the target object, it therefore serves the same purpose as applicant's takeover prompt.

"and wherein the takeover prompt is further output when the driver overrides the distance and speed controller by depressing an accelerator. –Labuhn does not discuss the alert's mechanism in detail nor the alert's action when the driver overrides the

Art Unit: 3661

controller by accelerating, but Winner, which teaches a vehicle with either or both a Lane Keeping Support (LKS) and an Adaptive Cruise Control (ACC) System addresses this. These systems share an alarm and each has an operational state and a regulating state. The operational state is entered when switch 26 and 28 are respectively activated. When the LKS system is operational, the warning function is active (Winner Paragraph 29). When the ACC system is operational “As long as this command [special command to turn on regulating function] has not been entered, the system emits a collision warning in **any** case if the radar system ascertains a dangerous approach to an obstacle.” Therefore, if the ACC and LKS have been made operational, and the operator depresses the accelerator causing the vehicle to make a dangerous approach to an obstacle, the collision warning will be emitted. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the Winner’s prior art elements of notifying the driver in Labuhn’s system to yield the predictable result that the driver is notified of the impending dangerous approach to an obstacle and can take evasive action.

With respect to **claim 10**, Labuhn discloses the prompt is at least one of: a visual display in a field of view of the driver, and an acoustic signal in an interior of the vehicle (Column 3, lines 63-65, Column 4, lines 2-7). See paragraph 2a above. Labuhn does not explicitly disclose the display is in a field of view of the driver and an acoustic signal is in an interior of the vehicle. However, it is well known that the vehicle instrument cluster or other display panel is in the field of view of the driver and/or

Art Unit: 3661

audible alerting apparatus for operator is an acoustic signal in an interior of the vehicle as the operator is inside of the vehicle while operating the vehicle (Column 3, lines 63-64, Column 4, lines 5-7).

With respect to **claim 12**, Labuhn discloses activation thresholds and deactivation thresholds of the prompt are not identical (FIG. 4, Column 8, lines 18-31). See paragraph 2a above.

With respect to **claim 13**, Labuhn discloses the distance and speed controller emits and receives radar signals, with the aid of which preceding vehicles can be recognized as target objects (Column 1, lines 27-29, Column 3, lines 50-57).

With respect to **claim 14**, Labuhn discloses a device for the distance and speed control of a motor vehicle (Column 2, lines 62-64 and Column 3, lines 10-12, 50-54), comprising:

an arrangement which outputs a prompt, informing a driver that the vehicle is coming critically close to a target object (FIG. 4 and Column 8, lines 31-32, 36-43 and 52-53), the arrangement being configured so that activation and deactivation of the takeover prompt occurs (FIG. 4 and Column 8, lines 66-67 and Column 9, lines 1-2) as a function at least one of:

i) a fixed minimum distance between the distance- and speed-controlled vehicle and the target object (FIG. 4, block 411, where X_M is the minimum inter-vehicle spacing as described in Column 7, line 23),

ii) a relative speed-dependent minimum distance between the distance- and speed- controlled vehicle and the target object (FIG. 4, block 411, where $VR'TB$ is the relative speed-dependent minimum distance as described in Column 3, lines 54-56), and

iii) a maximum vehicle deceleration producible by the distance and speed controller (FIG. 4, block 423 where D_{MAX} is represents a deceleration limit as described in Column 9, lines 53-62). See paragraph 2a above.

wherein the takeover prompt is further output when the driver overrides the distance and speed controller by depressing an accelerator. – (Winner, mentions that the system emits a collision warning in any case if the radar system ascertains a dangerous approach to an obstacle (Para. 30).

With respect to **claim 15**, Labuhn discloses a display device, the display device displaying the prompt in a field of view of the driver (Column 3, lines 63-65, Column 4, lines 2-7). See paragraph 2a above. Labuhn does not explicitly disclose the display device is in a field of view of the driver. However, it is well known that the vehicle instrument cluster or other display panel visual and/or audible alerting apparatus for operator interfacing provides visual display in a field of view of the driver as the operator is inside of the vehicle while operating the vehicle (Column 3, lines 63-64, Column 4,

Art Unit: 3661

lines 5-7).

With respect to **claim 16**, Labuhn discloses an acoustic device, the prompt being output as an acoustic signal by the acoustic device in an interior of the vehicle (Column 3, lines 63-65, Column 4, lines 2-7). See paragraph 2a above. Labuhn does not explicitly disclose the acoustic device is in an interior of the vehicle. However, it is well known that the vehicle instrument cluster or other display panel visual and/or audible alerting apparatus for operator interfacing provides an acoustic signal in an interior of the vehicle as the operator is inside of the vehicle while operating the vehicle (Column 3, lines 63-64, Column 4, lines 5-7).

With respect to **claim 17**, Labuhn discloses a radar device, the radar device configured to emit and receive radar signals so that a preceding vehicle can be recognized as a target object (Column 1, lines 27-29, Column 3, lines 50-57).

With respect to **claim 18**, Labuhn discloses a display device, the display device displaying the takeover prompt in a field of view of the driver; and an acoustic device, the takeover prompt being output as an acoustic signal by the acoustic device in an interior of the vehicle (See rejections of claims 15 and 16, above).

With respect to **claim 19**, Labuhn discloses a radar device, the radar device configured to emit and receive radar signals so that a preceding vehicle can be recognized as a target object (See rejection of claim 17, above).

With respect to **claim 21**, Labuhn discloses activation thresholds and deactivation thresholds of the prompt are not identical (See rejection of claim 12, above).

With respect to **claim 22**, Labuhn discloses the distance and speed controller emits and receives radar signals, with the aid of which preceding vehicles can be recognized as target objects (See rejection of claim 13, above).

With respect to **claim 23**, Labuhn discloses at least one of a display device, the display device displaying the prompt in a field of view of the driver, (Column 3, lines 63-65, Column 4, lines 2-7). (See discussion at claim 15 above) and , Labuhn discloses an acoustic device, the prompt being output as an acoustic signal by the acoustic device in an interior of the vehicle; (Column 3, lines 63-65, Column 4, lines 2-7). See discussion at claim 16 above) and

Labuhn discloses a radar device, the radar device configured to emit and receive radar signals so that a preceding vehicle can be recognized as a target object; (Column 1, lines 27-29, Column 3, lines 50-57) (See discussion at claim 17 above).

Labuhn discloses activation thresholds and deactivation thresholds of the prompt are not identical (See rejection of claim 21, above). and

Labuhn discloses the distance and speed controller emits and receives radar signals, with the aid of which preceding vehicles can be recognized as target objects (See rejection of claim 22, above).

With respect to **claim 24**, Labuhn discloses the prompt is at least one of: a visual display in a field of view of the driver, and an acoustic signal in an interior of the vehicle (Column 3, lines 63-65, Column 4, lines 2-7) (See discussion at claim 10 above) and Labuhn discloses activation thresholds and deactivation thresholds of the prompt are not identical (FIG. 4, Column 8, lines 18-31) (See discussion at claim 12 above) and Labuhn discloses the distance and speed controller emits and receives radar signals, with the aid of which preceding vehicles can be recognized as target objects (Column 1, lines 27-29, Column 3, lines 50-57) (See discussion at claim 12 above).

Response to Arguments

Applicant's arguments with respect to claims 9 and 14 filed May 28, 2009 have been fully considered but they are not persuasive. The Winner reference states that as long as the ACC/LKS system is in the operational state rather than the regulating state, "the system emits a collision warning in any case if the radar system ascertains a dangerous s approach to an obstacle." Winner does not list any exceptions to this

Art Unit: 3661

statement, therefore there is no reason to believe it will not emit a collision warning if the accelerator is depressed and the vehicle comes critically close to the an object.

In response to applicant's request for evidence to support any Official Notices, is noted, but the Examiner does not detect any Official Notice taken. Specifics of the request are solicited in future correspondence.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LIN B. OLSEN whose telephone number is (571)272-9754. The examiner can normally be reached on Mon - Fri, 8:30 -5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lin B Olsen/
Examiner, Art Unit 3661

/Thomas G. Black/
Supervisory Patent Examiner, Art Unit 3661